

Star Lab Checklist

1. Unroll dome. Footprint: ~12 foot diameter and 10' high.
2. Attach the fan to end snaps as best as you can, then secure it if needed with one of the straps from the dome. Using an extension cord (not included), unless it reaches the wall socket, plug in and power up the fan.
3. Allow the dome to fill, shaping it if necessary.
4. Open the projector box. Remove the projector, yellow box and cylinders that you will be using. Close the box – you will be using this as a base for the projector.
5. The projector can be assembled either in the light, plugged in, and moved into the dome or plugged in and assembled inside the dome. Before plugging in/turning on the projector, be sure to remove the protective cap on the lamp (small black cap with red dot). Also remove the cardboard tube and black protective sleeve. Check to see that the projector bulb is seated and upright. If you need to move it or replace it, please do not touch it with your fingertips. Use a tissue or small cloth to protect it. Also check that the two electrodes on the back of the lamp are secure.
6. Once inside the dome, place the box in the center. It can be placed in a horizontal or vertical position. I generally have found that the vertical position gives the box a smaller footprint, leaving more space for students and also raises the horizon line for your presentation.
7. Attach the Starfield Cylinder (unless you are doing kindergarten or first grade – then you may want to start with the Constellation Cylinder so it will be brighter) and adjust it for the current date and time (see below). Add planets and moon phase if desired.
8. Adjust the projector so north will be over the doorway. Turn up the side lights and leave the projector bulb on dim. You are ready for students.

Notes:

*You will want to have at least 2 flashlights or a small camping lantern to light the entrance tunnel.

*You may want to use your own laser pointer.

*Unless you want to be precise, in the fall set the Starfield so The Great Square of Pegasus is up near the top of the sky (zenith). The Big Dipper will be in the doorway. In winter, Orion will dominate the Southern sky and the Dipper will be in the northeast. In the spring, put Leo the Lion's backward question mark up at the top. The Big dipper will also be at the top. If you are doing a program in the summer, the Dipper will be in the northeast sky and the backwards J of the Scorpion will stretch across the southern horizon.

*Find the position and phase of the moon and any dusk visible planets in a magazine like Astronomy or Sky and Telescope or on their or other similar websites. You can always go outside at dusk a day or two before your presentation and check the sky in your area for the major constellations and to see what planets you can see. If you aren't sure of your constellations, just look to the northern sky for the position of the Big Dipper – after sundown, it takes about 30-45 minutes for the brightest stars (and the planets) to show up. Since you probably don't want your students staying up late, use the earliest night sky you can.

Any of the basic information from GeoDome night sky programs can be used in the StarLab.